

REMARKS

The specification has been amended to recite “FIGS. 1A-1C” to match Sheet 1 of 9 of the figures as originally filed. Accordingly, no new matter has been added.

Claims 68-70, which were drawn to a non-elected invention, are cancelled without prejudice.

Claim 90 has been amended to recite “an extend object.” Support for this amendment can be found throughout the specification, for example, on page 8, lines 35-36. Claims 94 and 101 have been amended to correct an antecedent basis issue arising from the amendment of claim 90.

Claims 71-104 remain pending for examination.

Election/Restrictions

Applicants confirm the election of Group II, claims 71-104.

Objection to Specification

The Office Action objects to the specification for lack of description of Figures 1A, 1B, and 1C in the brief description of the drawings.

Applicants have amended the specification to describe these figures. No new matter has been added.

Claim Rejections – 35 U.S.C. § 102(b)

Claims 71, 72, 75-79, 85-91, and 94-98 were rejected under 35 U.S.C. § 102(b) as being anticipated by Eigen et al.

Applicants respectfully disagree. Although Eigen discloses DNA, the DNA is disclosed in the context of particle detection, e.g., where the DNA is present as a particle. See, e.g., p. 5740, left column, first paragraph after the abstract. Eigen also discloses “thread-like sinks” (e.g. on p. 5743). However, in this context, the “thread-like sinks” are discussed in reference to the detection of a particle within a fixed volume element. For example, Eigen states that “Physically, this expression means the following: if we subdivide the territory of each particle (volume V_i) into compartments of volume V_c , the chance of finding “ i ” in any one of the k

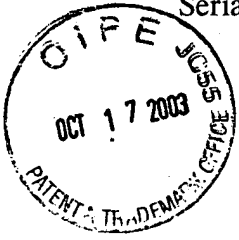
compartments is $(V_c/V_t) \times k$ and the frequency of hopping into it is $1/(2k\tau_c)$ (i.e., k canceling out),“ (page 5743, left column, last paragraph) and “The above relations are important in the context of this paper because a decision must be made whether the laser beam should be focused into a fixed volume element of space observing the particles as they diffuse in and out, or whether the entire space should be scanned,” (p. 5743, middle column, first full paragraph).

The Eigen reference describes analysis of particles using FCS. FCS is based on the analysis of Brownian motion of particles. This type of analysis does not appear to be compatible with linear analysis of an extended object, as claimed in the instant invention. In claiming an extended object, the Applicant is explicitly referring to an elongated sample which differs from native state samples. Specifically, the Applicant's claimed "extended object" refers to a linearized sample, such as a linearized DNA strand which a) is in a physically different state than the native-state DNA described in the reference, and b) does not appear to be amenable to use in the FCS systems of the type described in the reference.

Thus, Eigen nowhere discloses or suggests an extended object, as recited in independent claims 71 and 90 (as amended). It is therefore respectfully requested that the rejection of claim 71 be withdrawn. Claims 72, 75-79, 85-89, 91, and 94-98 depend, either directly or indirectly, from claim 71, and it is respectfully requested that the rejection of those claims also be withdrawn.

CONCLUSION


In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicants' attorney at the telephone number listed below.



If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,

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